### § 27.1111

(2) A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use a bidding credit of 25 percent, as specified in \$\frac{1}{2}\$1.2110(f)(2)(ii) of this chapter, to lower the cost of its winning bid on any of the licenses in this part.

RELOCATION OF INCUMBENTS

#### § 27.1111 Relocation of fixed microwave service licensees in the 2110– 2150 MHz band.

Part 22, subpart E and part 101, subpart B of this chapter contain provisions governing the relocation of incumbent fixed microwave service licensees in the 2110-2150 MHz band.

[71 FR 29835, May 24, 2006]

PROTECTION OF INCUMBENT OPERATIONS

# §27.1131 Protection of Part 101 operations.

All AWS licensees, prior to initiating operations from any base or fixed station, must coordinate their frequency usage with co-channel and adjacent channel incumbent, Part 101 fixed-point-to-point microwave licensees operating in the 2110–2155 MHz band. Coordination shall be conducted in accordance with the provisions of §24.237 of this chapter.

#### § 27.1132 Protection of incumbent operations in the 2150-2160/62 MHz band

All AWS licensees, prior to initiating operations from any base or fixed station, shall follow the provisions of §27.1255 of this part.

 $[71~{\rm FR}~29835,~{\rm May}~24,~2006]$ 

## §27.1133 Protection of Part 74 and Part 78 operations.

AWS operators must protect previously licensed Broadcast Auxiliary Service (BAS) or Cable Television Radio Service (CARS) operations in the adjacent 2025–2110 MHz band. In satisfying this requirement AWS licensees must, before constructing and operating any base or fixed station, determine the location and licensee of all BAS or CARS stations authorized in their area of operation, and coordinate their planned stations with those li-

censees. In the event that mutually satisfactory coordination agreements cannot be reached, licensees may seek the assistance of the Commission, and the Commission may, at its discretion, impose requirements on one or both parties.

# §27.1134 Protection of Federal Government operations.

(a) Protection of Department of Defense operations in the 1710-1755 MHz band. The Department of Defense (DoD) operates communications systems in the 1710-1755 MHz band at 16 protected facilities, nationwide. AWS licensees must accept any interference received from these facilities and must protect the facilities from interference. AWS licensees shall protect the facilities from interference by restricting the operation of their base and fixed stations from any locations that could potentially permit AWS mobile, fixed, and portable stations transmitting in the 1710-1755 MHz band to cause interference to government operations within the radii of operation of the 16 facilities (the radii of operation of each facility is indicated in the third column of Table 1 immediately following paragraph (a)(3) of this section). In addition, AWS licensees shall be required to coordinate any operations that could permit mobile, fixed, and portable stations to operate in the specified areas of the 16 facilities, as defined in paragraph (a)(3) of this section. Protection of these facilities in this manner shall take place under the following conditions:

- (1) At the Yuma, Arizona and Cherry Point, North Carolina facilities, all operations shall be protected indefinitely.
- (2) At the remaining 14 facilities, airborne and military test range operations shall be protected until such time as these systems are relocated to other spectrum, and precision guided munitions (PGM) operations shall be protected until such time as these systems are relocated to other spectrum or until PGM inventory at each facility is exhausted, whichever occurs first.
- (3) AWS licensees whose transmit operations in the 1710–1755 MHz band consist of fixed or mobile operations with nominal transmit EIRP values of 100

#### **Federal Communications Commission**

mW or less and antenna heights of 1.6 meters above ground or less shall coordinate their services around the 16 sites at the distance specified in row a. of Table 2. AWS licensees whose transmit operations in the 1710–1755 MHz band consist of fixed or mobile operations with nominal transmit EIRP values of 1 W or less and antenna heights of 10 meters above ground or

less shall coordinate their services around the 16 sites at the distance specified in row b. of Table 2. These coordination distances shall be measured from the edge of the operational distances indicated in the third column of Table 1, and coordination with each affected DoD facility shall be accomplished through the Commander of the facility.

TABLE 1—PROTECTED DEPARTMENT OF DEFENSE FACILITIES

Location	Coordinates	Radius of operation (km)
Cherry Point, NC34°58′ N, 076°56′ W	100	
Yuma, AZ32°32′ N, 113°58′ W	120	
China Lake, CA35°41′ N, 117°41′ W		
Eglin AFB, FL30°29′ N, 086°31′ W	120	
Pacific Missile Test Range/Point Mugu, CA	34°07′ N, 119°30′ W	80
Nellis AFB, NV36°14′ N, 115°02′ W	160	
Hill AFB, UT41°07′ N, 111°58′ W	160	
Patuxent River, MD38°17′ N, 076°25′ W	80	
White Sands Missile Range, NM33°00′ N, 106°30′ W		
Fort Irwin, CA35°16′ N, 116°41′ W		
Fort Rucker, AL31°13′ N, 085°49′ W		
Fort Bragg, NC35°09′ N, 079°01′ W	50	
Fort Campbell, KY36°41′ N, 087°28′ W	50	
Fort Lewis, WA47°05′ N, 122°36′ W	50	
Fort Benning, GA32°22′ N, 084°56′ W		
Fort Stewart, GA31°52′ N, 081°37′ W	50	

TABLE 2—COORDINATION DISTANCES FOR THE PROTECTED DEPARTMENT OF DEFENSE FACILITIES

1710–1755 MHz transmit operations	Coordination distance (km)
a. EIRP <=100 mW, antenna height <=1.6 m AG	35
b. EIRP <=1 W, antenna height <=10 m AG	55

- (b) Protection of non-DoD operations in the 1710–1755 MHz and 1755–1761 MHz bands. Until such time as non-DoD systems operating in the 1710–1755 MHz and 1755–1761 MHz bands are relocated to other spectrum, AWS licensees shall protect such systems by satisfying the appropriate provisions of TIA Telecommunications Systems Bulletin 10–F, "Interference Criteria for Microwave Systems," May, 1994 (TSB 10–F).
- (c) Protection of Federal Government operations below 1710 MHz. AWS licensees operating fixed stations in the 1710–1755 MHz band, if notified that such stations are causing interference to radiosonde receivers operating in the Meteorological Aids Service in the 1675–1700 MHz band or a meteorological-satellite earth receiver operating in the
- Meteorological-Satellite Service in the 1675–1710 MHz band, shall be required to modify the stations' location and/or technical parameters as necessary to eliminate the interference.
- (d) Recognition of NASA Goldstone facility operations in the 2110–2120 MHz band. The National Aeronautics and Space Administration (NASA) operates the Deep Space Network (DSN) in the 2110–2120 MHz band at Goldstone, California (see Table 3). NASA will continue its operations of high power transmitters (nominal EIRP of 105.5 dBW with EIRP up to 119.5 dBW used under emergency conditions) in this band at this location. AWS licensees must accept any interference received from the Goldstone DSN facility in this band.

### §27.1135

TABLE 3-LOCATION OF THE NASA GOLDSTONE DEEP SPACE FACILITY

Location	Coordinates	Maximum transmitter output power
Goldstone, California	35°18′ N 116°54′ W	500 kW

 $[69~{\rm FR}~5716,~{\rm Feb.}~6,~2004,~{\rm as~amended~at}~73~{\rm FR}~50571,~{\rm Aug.}~27,~2008]$ 

#### § 27.1135 Protection of non-Federal Government Meteorological-Satellite operations.

AWS licensees operating fixed stations in the 1710–1755 MHz band, if notified that such stations are causing interference to meteorological-satellite earth receivers operating in the Meteorological-Satellite Service in the 1675–1710 MHz band, shall be required to modify the stations' location and/or technical parameters as necessary to eliminate the interference.

COST-SHARING POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 2110-2150 MHz AND 2160-2200 MHz BANDS

SOURCE: Sections 27.1160 through 27.1174 appear at 71 FR 29835, May 24, 2006, unless otherwise noted.

# § 27.1160 Cost-sharing requirements for AWS.

Frequencies in the 2110-2150 MHz and 2160-2180 MHz bands listed in §101.147 of this chapter have been reallocated from Fixed Microwave Services (FMS) to use by AWS (as reflected in §2.106) of this chapter. In accordance with procedures specified in §22.602 and §§101.69 through 101.82 of this chapter, AWS entities are required to relocate the existing microwave licensees in these bands if interference to the existing microwave licensee would occur. All AWS entities that benefit from the clearance of this spectrum by other AWS entities or by a voluntarily relocating microwave incumbent must contribute to such relocation costs. AWS entities may satisfy their reimbursement requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in §27.1164. However, AWS entities are required to reimburse other AWS entities or voluntarily relocating microwave incumbents that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in §27.1162) from AWS entities or other Emerging Technologies (ET) entities, including Mobile Satellite Service (MSS) operators (for Ancillary Terrestrial Component (ATC) base stations), that are not parties to the agreement. The costsharing plan is in effect during all phases of microwave relocation specified in §\$ 22.602 and 101.69 of this chapter. If an AWS licensee enters into a spectrum leasing arrangement (as set forth in part 1, subpart X of this chapter) and the spectrum lessee triggers a cost-sharing obligation, the licensee is the AWS entity responsible for satisfying the cost-sharing obligations under §§ 27.1160-27.1174.

#### § 27.1162 Administration of the Cost-Sharing Plan.

The Wireless Telecommunications Bureau, under delegated authority, will select one or more entities to operate as a neutral, not-for-profit clearing-house(s). This clearinghouse(s) will administer the cost-sharing plan by, *inter alia*, determining the cost-sharing obligation of AWS and other ET entities for the relocation of FMS incumbents from the 2110–2150 MHz and 2160–2200 MHz bands. The clearinghouse filing requirements (see §§ 27.1166(a), 27.1170) will not take effect until an administrator is selected.

### §27.1164 The cost-sharing formula.

An AWS relocator who relocates an interfering microwave link, *i.e.*, one that is in all or part of its market area and in all or part of its frequency band or a voluntarily relocating microwave incumbent, is entitled to *pro rata* reimbursement based on the following formula: